

1 CLAIMS

2 1. A rock cutter for splitting stones comprising: (a) a support means having a first end, a
3 second end, a left side and a right side and a support length between the first end and the
4 second end and a support surface along the support length for supporting a rock to be cut;
5 (b) a first blade holding means attached to the support means for holding a blade and
6 extending the blade along the support length;

7 (c) a first blade having a sharpened edge with a first blade edge length attached to the first
8 blade holding means,

9 (d) a second blade holding means for holding a blade in a fixed position on the support
10 means along the support length,

11 (e) a second blade having a sharpened edge and a second blade edge length.

12 2. The cutter of claim 1 wherein the support means wherein the first blade holding means
13 supports the first blade so that the first blade length is approximately perpendicular to the support
14 surface.

15 3. The cutter of claim 1 wherein the first blade holding means comprises a hydraulically
16 driven piston having a hydraulic cylinder and a piston arm with a blade holding means for
17 holding the first blade so that it is approximately perpendicular to the support surface.

18 4. The invention of claim 3 further comprising a shock means for applying a sudden force
19 to the first blade.

20 5. The invention of claim 3 wherein the first blade holding means further comprises a
21 support arm slidably contacting the left side and a support arm slidably contacting the
22 right side so that the position of the first blade is supported as the blade moves along the

1 support length.

2 6. The invention of claim 5 wherein the second blade holding means comprises a support

3 arm slidably contacting the left side and a support arm slidably contacting the right side

4 so that the position of the second blade is supported where held along the support length.

5 7. The invention of claim 6 wherein the second blade holding means further comprises a

6 fixing means for holding the second blade at a fixed position along the support length.

7 8. The invention of claim 7 wherein the fixing means further comprises an opening defined

8 by the support arm contacting the left side adjacent to the left side, a plurality of

9 corresponding openings defined by the left side and a securing means fitting through the

10 support arm opening and at least one of the plurality of left side openings.

11 9. The invention of claim 8 wherein the fixing means further comprises an opening defined

12 by the support arm contacting the right side adjacent to the right side, a plurality of

13 corresponding openings defined by the right side and a securing means fitting through the

14 support arm opening and at least one of the plurality of right side openings.

15 10. The invention of claim 7 wherein the fixing means further comprises a brake having a

16 first end and a second end with the first end attached to the second blade, a plurality of

17 openings defined along the support surface and wherein the second end of the brake is

18 insertable into at least one of the plurality of openings.

19 11. The invention of claim 1 wherein the support means first end is movably attached to the

20 support means second end and wherein the first blade holding means is attached to the

21 first end and the second blade holding means is attached to the second end and wherein

22 the support means further comprises a fixing means for controlling the movement of the

1 first end from the second end so that the distance between the first blade and second blade
2 may be adjusted.

3 12. The invention of claim 11 wherein the fixing means comprises a receiving bracket
4 defining an opening on the first end and a rod attached to the second end movably inserted
5 within the opening of the receiving bracket and a fixing means to fix the degree of
6 insertion of the rod so as to fix the length of the support means.

7 13. The invention of claim 1 further comprising a catching means located along the length of
8 the support means and below the support surface for receiving pieces falling from the
9 support surface.

10 14. The invention of claim 13 wherein the catching means comprises an angled plate rising
11 on either side of the support surface from below the support surface so that rocks split fall
12 onto the angled sides.

13 15. The invention of claim 1 further comprising a shield means located on the first end and
14 foldable above the support length so that a rock supported on the support surface may be
15 covered to prevent chips of rock from exiting the work area.

16 16. The invention of claim 3 further comprising a supporting plate attached to the support
17 means for supporting a motor for supplying hydraulic fluid to the hydraulic cylinder.

18 17. The invention of claim 16 further comprising an axle rotatably connected to the
19 supporting plate below the support means and a plurality of wheels attached to the axle
20 and wherein the invention further comprises a trailer hitch attached to the supporting
21 plate so that the rock splitter may be attached to a trailer hitch for movement.

22 18. A rock cutting process following process steps:

1. The blades are separated by a distance adequate to allow the stone to be put into
2. place with the stone marked on either side where the cut it to be made as with a
3. chalk line;

4. 2. The blades are then slowly adjusted so that they come together on either side
5. where the cut is to be made;

6. 3. Thereafter the user moves back so that potential flying rock or debris does not hurt
7. the user and activates the slow expansion of the piston rod;

8. 4. Once the stone breaks into two pieces cut thereby and falls in the V the user can
9. remove them for use or reposition them for further cuts.

10. 19. A hitch for holding a trailer to a vehicle comprising:
11. A) an attachment means for holding the vehicle, such as a joint of a ball and joint
12. arrangement attached to a vertical arm;
13. B) an alignment walls on either side of the vertical arm;
14. C) a fixing means for fixing the location of the vertical arm to the alignment walls.

15. 20. The invention of claim 19 wherein the vertical arm comprises at least one arm opening
16. and wherein at least one of the alignment walls defines at least wall one opening and
17. wherein the fixing means comprises a rod means insertable through the at least one arm
18. opening and at least one wall opening.